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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/735,249 | 12/12/2003 | Jean Cotteret | LORE:015US | 9811 |

7590

08/11/2005

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| EXAMINER |
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ELHILO, EISA B

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| ART UNIT | PAPER NUMBER |
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1751

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,249

Applicant(s)

COTTERET ET AL.

Examiner

Eisa B. Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 11 and 22-45 is/are rejected.
- 7) ☒ Claim(s) 9 and 12-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/26/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claims 1-45 are pending in this application.

DETAILED ACTION

1 The examiner makes of record that instant claims 31, 32, 37 and 40 recite a broad range of components followed by a series of narrow ranges. For examination purposes, the examiner asserts that the narrow ranges recited in the instant claims 31, 32, 37 and 40 are merely exemplary ranges, and thus, the prior art will be applied against the broadest ranges recited in the instant claims 31, 32, 37 and 40. Further, the examiner suggests that applicant should delete the narrow ranges from the instant claims 31, 32, 37 and 40 add new dependent claims that recite the narrow ranges recited in the instant claims 31, 32, 37 and 40.

Claim Rejections - 35 USC § 103

2 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10-11 and 22-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim et al. (US 6,461,391 B1) in view of Cottard et al. (US 6,436,151 B2).

Lim et al. (US' 391 B1) teaches a hair dyeing composition comprising an oxidation base of cationic tertiary para-phenylenediamine having a formula (1), which is identical to the claimed formula (I), when in the reference formula (1), R, R1 and R2 are alkyl radicals, R4 is hydrogen atom or an alkyl radical and R5 is a hydrogen atom as claimed in claims 1-8 and 10-

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11 (see col. 2, formula (1) and lines 44-50) and when in the claimed formula (I), R2 represents the onion radical Z of the claimed formula (II), R3 is a hydrogen atom, n is 1 or 0 and R1 is an alkyl radical. Lim et al. also, teaches the compounds 1-(4-aminophenyl)-N,N-dimethyl-N-pentylpyrrolidin-3-ammonium iodide and 1-(4-aminophenyl)-N-(2-hydroxyethyl)-N,N-dimethylpyrrolidin-3-ammonium iodide which are identical to the claimed compounds as claimed in claims 22-26 (see col. 19, Example 22 (compound 7) and col. 26, Example 29 (compound 14) and quaternized cationic polymers (see col. 9, lines 18-24). The cationic tertiary para-phenylenediamine is represented in the amount of 0.01 to about 5.0%, which is within the claimed range as claimed in claim 32 (see col. 3, lines 43-46), wherein the composition also comprises cationic polymers as claimed in claim 33 (see col. 9, line 19), thickening polymers as claimed in claim 34 (see col. 8, lines 39-55), surfactants as claimed in claim 35 (see col. 8, lines 23-25), additional primary intermediate (oxidation bases) of benzene-1,4-diamine (para-phenylenediamine) as claimed in claim 36 (see col. 3, line 57), coupler of resorcinol (1,3-dihydroxybenzene) as claimed in claims 38-39 (see col. 4, lines 56-57), wherein the couplers are presented in the amount of 0.005 to 20% which within the claimed range as claimed in claim 40 (see col. 4, lines 50-52), wherein the composition comprises direct dyes as claimed in claim 41 (see col. 7, lines 18-54), wherein the composition further comprises hydroxylated solvent ethanol as claimed in claim 42 (see col. 8, line 15) and oxidizing agent of hydrogen peroxide as claimed in claim 43 (see 9, line 66). Lim et al. (US' 391 B1) also teaches a

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method for dyeing hair as claimed in claim 44 (see col. 9, lines 60-64).

The instant claims differ from the reference by reciting specific cationic polymers in the dyeing composition.

However, Lim et al. (US' 391) suggests the use of genus cationic polymers in the dyeing composition (see col. 9, lines 18-20).

Cottard et al. (US' 151 B2) in analogous art of hair dyeing formulation, teaches a composition comprising cationic polymers having structural formula (a) (see col. 19, formula (a), formula (VIII) (see col. 20, formula (VIII)) which are similar to the claimed formulae (Va) and (Vb) and wherein the cationic polymers are used in the amounts 0.01 to 10% which within the claimed range as claimed in claim 31 (see col. 21, line 20-21). Cottard et al. (US' 151) also teaches the cationic polymer guar gum modified with a 2,3-epoxypropyltrimethylammonium as claimed in claim 27 (see col. 16, lines 19-23).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Lim et al. (US' 391) by incorporating the cationic polymers as taught by Cottard et al. (US' 151 B2) to make such a composition. Such a modification would be obvious to one having ordinary skill in the art because Lim et al. (US' 391) as a primary reference suggests the use of cationic polymers in the dyeing composition. Cottard et al. (US' 151) as a secondary reference clearly teaches the claimed species in a dyeing composition, and, thus, a person of an ordinary skill would be motivated to incorporate these cationic polymers of Cottard et al. (US' 151) in the dyeing composition of Lim et al. (US' 391) with the reasonable expectation of success for improving the

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dyeing performance and would expect such a composition to have similar properties to those claimed, absent unexpected results.

With respect to claim 37 it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amounts of the oxidation bases in the composition in order to get the maximum effective amounts of these ingredients in the composition because the reference teaches that the couplers and oxidation bases are presented in the amounts of 0.001 to about 10% which are generally used in equivalent amounts (see col. 7, lines 8-15). Further, as to the optimization of results, a patent will not be granted based upon the optimization of the result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness, see *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F. 2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to claim 45, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a composition by using a multi-compartment device for holding and maintaining the composition because the reference clearly teaches that the oxidation composition is mixed with the oxidizing agent at the time of use which implies that both the oxidation composition and the oxidizing agent are provided in separate containers, and, thus, a person of the ordinary skill in the art would be motivated to use a multi-compartment device for holding the dyeing composition, absent unexpected results.

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Allowable Subject Matter

3 Claims 9 and 12-21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose cationic para-phenylenedimanie compounds of the claimed formula (II), in which x is equal 1. The prior art of record also do not teach or disclose para-phenylenedimanie compounds of the claimed formulae (III) and (IV). The prior art of record further do not teach or disclose the claimed formula

Conclusion

4 The references listed on from 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo
Patent Examiner
Art Unit 1751

August 5, 2005